



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/683,823      | 02/20/2002  | Dennis Colditz       | 24-NS-120748        | 7483             |

23465 7590 04/22/2004

JOHN S. BEULICK  
C/O ARMSTRONG TEASDALE, LLP  
ONE METROPOLITAN SQUARE  
SUITE 2600  
ST LOUIS, MO 63102-2740

EXAMINER

PALABRICA, RICARDO J

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

3641

DATE MAILED: 04/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/683,823

Applicant(s)

COLDITZ ET AL.

Examiner

Rick Palabrica

Art Unit

3641

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,4-13,16-24 and 27-41 is/are pending in the application.
- 4a) Of the above claim(s) 9,10,19,20,22,29,30,32 and 34-41 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,4-8,11-13,16-18,21,23,24,27,28,31 and 33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

### DETAILED ACTION

1. Applicant's 1/27/04 Amendment, which directly amends independent claims 1, 13 and 24, is acknowledged.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 4-8, 11-13, 16-18, 21, 23, 24, 27, 28, 31 and 33 are rejected under 35 U.S.C. 102(b) as being anticipated by Hardin, Jr. et al. (U.S. 4,288,292) who discloses a rotating apparatus that facilitates in-vessel transfer or nuclear reactor fuel (e.g. see Figs. 2-7).

Applicant's claim language reads on Hardin, Jr. et al.'s invention as follows: a) "frame comprising a plurality of interconnected beams" reads on intermediate rotating plug 26 (note the interconnected beam structure disposed beneath this frame-see Fig. 2 for details); b) "floor attached to and covering said frame" reads on the floor covering of plug 26; c) "support structure attached to said frame" reads on either one or both of structures 22 and 24; d) "auxiliary platform" reads on small rotating plug 28, which is movably coupled to the frame 26 and extends through the access opening of the floor of said frame; e) "safety rail around a perimeter of the access opening" reads on the raised wall of plug 28; f) "safety rail around the outer perimeter of the floor" reads on the raised

Art Unit: 3641

wall around frame 26; g) "lifting device" reads on transfer mechanism 30 that is used to transfer fuel assemblies; h) "refueling floor" reads on the top of concrete support 11.

As to claim 11, the Applicant does not claim the refueling floor of the reactor as part of his invention. Hardin, Jr. et al.'s invention can be configured to have its pressure vessel head mounted on a concrete well having a ledge, the latter providing support for said pressure vessel head. This configuration allows Hardin, Jr. et al.'s invention to have the functional capability of having the support structure engage the refueling floor of the reactor.

As to the limitation in claim 13 regarding a primary containment vessel, this is inherent in any nuclear facility wherein that exercises Hardin, Jr. et al.'s invention.

The claims are to an apparatus but they contain statements that are essentially statements of intended or desired use. For example, the statement in claim 1 starting with "for a nuclear reactor" and ending with "refueling floor", "configured to engage the refueling floor of the reactor", etc. These and other statements of intended use do not serve to patently distinguish the claimed structure over that of the reference, as long as the structure of the cited references is capable of performing the intended use. See MPEP 2111-2115.

See also MPEP 2114 that states:

A claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus" if the prior art apparatus teaches all the structural limitations of the claim. *Ex parte Masham*, 2 USPQ2d 1647.

Art Unit: 3641

Claims directed to apparatus must be distinguished from the prior art in terms of structure rather than function. *In re Danly*, 263 F.2d 844, 847, 120 USPQ 528, 531.

[A]pparatus claims cover what a device is, not what a device does.”  
*Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 15 USPQ2d 1525, 1528.

As set forth in MPEP 2115, a recitation in a claim to the material or article worked upon does not serve to limit an apparatus claim.

As to the term “reactor servicing platform” in the claim 1, this term has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

The structure in the cited reference is capable of being used in the same manner and for the intended or desired use as the claimed invention.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 3641

3. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hardin, Jr. et al. in view of Spelek (U.S. 4,115,193). Hardin, Jr. et al. disclose the applicant's claim except for a support structure configured to engage the refueling floor of the reactor. Note that Applicant's claim language "refueling floor" reads on the top of Hardin, Jr.'s concrete structure 11.

Spelek teaches a support system for nuclear reactor pressure vessels that can withstand all possible combinations of stresses caused by a postulated core disrupting accident during reactor operation (see Abstract). This support engages the pressure vessel to the containment well. He also teaches that it is customary to have the pressure vessel mounted on and supported by the wall of the containment well, the latter radially surrounding the pressure vessel. Hardin, Jr.'s concrete structure 11 has the same function as this containment well of Spelek.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus, as disclosed by Hardin Jr. et al., by the teaching of Spelek, to use a support structure to engage the pressure vessel with the containment well and thereby engage the structures 22,24 of Hardin Jr., with the reactor refueling floor, to gain the advantages thereof (i.e., additional safety feature), because such modification is no more than the use of well-known expedients within the nuclear art.

### ***Conclusion***

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

Art Unit: 3641

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rick Palabrica whose telephone number is 703-306-5756. The examiner can normally be reached on 7:00-4:30, Mon-Fri; 1st Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Carone can be reached on 703-306-4198. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

RJP  
April 14, 2004



**MICHAEL J. CARONE**  
**SUPERVISORY PATENT EXAMINER**